II.1 Introduction

(See Section 1 of the current Nomination Form and Section 1, 2 and 3 of the original Nomination Forms)

- 1a) State Party: USA
- 1b) Name of World Heritage property:

 Mesa Verde
- 1c) Please provide geographical coordinates for the site to the nearest second. (In the case of large sites, please give three sets of geographical coordinates.)

Geographical coordinate: 12 E729880 N4135570

Geographical coordinate: 12 E736950 N4122600

Geographical coordinate: 12 E717250 N4114850

Geographical coordinate: 12 E728380 N4136730

1d) Give date of inscription on the World Heritage List.

date (dd/mm/yyyy): 09/08/1978

- 1e) Give date of subsequent extension(s), if any.
- 1f) List organization(s) responsible for the preparation of this site report.

Organization #1

Organization Name: Mesa Verde National Park

Last Name: Wiese First Name: Larry T.

Title: Superintendent Address: P. O. Box 8

City: Mesa Verde State/Prov: Colorado Postal Code: 81330

Telephone: 970-529-4600 Fax: 970-529-4537

Email: larry_wiese@nps.gov

II.2 Statement of Significance (see Section 2 of the current Nomination Form and Section 5 of the original Form)

2a) When a State Party nominates a property for inscription on the World Heritage List, it describes the heritage values of the property which it believes justifies the inscription of the property on the World Heritage List. Please summarize the justification for inscription as it appears in the original nomination of the property.

The original nomination stated that the Anasazi, or Ancestral Puebloan, people have long been recognized for the spectacular architecture which they constructed in natural alcoves in the mesa and canyon topography of the Colorado Plateau. The first signs of occupation of the area, which is now Mesa Verde National Park, date to ca. 450 AD, when pithouses were constructed on the tops of the mesas. Pithouses evolved to surface pueblo sturctures with subterranean religious structures called kivas. Dry-land farming, weaving with yucca fiber, and pottery-making characterize these early people.

Around 1100 AD these people began to construct multi-storied sandstone and mud-mortar buildings within the alcoves which have become known as "cliff dwellings". Irrigation systems were developed to maximize the benefit of rain in an arid climate. Distinctive black-on-white pottery and corrugated vessels of high quality were produced in great quantity.

By 1300 AD, these people had migrated to the south and west of Mesa Verde, where their descendants live today (states of New Mexico and Arizona).

2b) At the time of initial inscription of a property on the World Heritage List, the World Heritage Committee indicates the property's outstanding universal value(s) (or World Heritage value(s)) by agreeing on the criteria for which the property deserves to be included on the World Heritage List. Please consult the report of the World Heritage Committee meeting when the property was listed and indicate the criteria for which the Committee inscribed the property on the World Heritage List. (Choose one or more boxes.)

Cultu	iral i ii iii iv v vi	Criteria
Natu	ral i ii iii iv	Criteria

2c) At the time of initial inscription, did the World Heritage Committee agree upon a Statement of Significance for the WHS? (Consult the report or minutes of the World Heritage Committee meeting when the property was listed.

NO

2c1) If YES, please cite it here.

2c2) If NO please propose a Statement of Significance for the World Heritage Site based on the consideration given the property by the Committee when it inscribed the property on the World Heritage List. (Note: Following the completion of the Periodic Report exercise, the State Party, in consultation with appropriate authorities, will determine whether to proceed with seeking a Committee decision to approve any proposed Statement of Significance. The Committee must approve any proposed Statement of Significance through a separate, formal process. See 7g.)

The World Heritage Committee inscribes Mesa Verde on the basis of cultural criteria (iii):

The Mesa Verde landscape contains a concentrated complex of spectacular, well-preserved Ancestral Puebloan sites. These sites date from ca. 450 AD to 1300 AD. There are approximately 4600 archeological sites within the park, of which 600 are the famous "cliff dwellings" such as Cliff Palace, Balcony House, and Square Tower House. Large portions of these sandstone and mud-mortar multi-story buildings have survived in tact, which is a tribute to the engineering skills of these early peoples. These sites represent a great variety of human activities, spanning over 900 years of occupation.

Mesa Verde provides exceptional testimony to the cultural traditions of 24 specific living Native American tribes, and represents a significant and living link between Puebloan Peoples' past and present way of life. This provides the world community an opportunity to understand and respect the diversity of human history.

2d) Since the original inscription of the property on the World Heritage List, has the World Heritage Committee agreed with a proposal by the State Party that the property be recognized for additional World Heritage values and added additional criteria to the inscription as a result of a re-nomination and/or extension of the property?

NO

2d1) If YES, please indicate which new criteria were added and the date. (dd/mm/yyyy)

II.3 Statement of Authenticity / Integrity (See Section 2 of the current Nomination Form and Section 4 of the original Form)

3a) In addition to meeting one or more of the criteria, which justify inscription on the World Heritage List, a natural or cultural property must meet the appropriate conditions of authenticity and/or integrity, as defined in clauses 24b and 44b of the Operational Guidelines for Implementing the World Heritage Convention. If at the time of inscribing the property on the World Heritage list, the State Party and the International Council on Monuments and Sites, ICOMOS and/or the International Union for Conservation of Nature and Natural Resources, IUCN, evaluated the authenticity and integrity of the property, please cite those evaluations here. (Please quote directly from the nomination, Committee minutes and the Advisory Body's evaluation.)

In the nomination of Mesa Verde National Park, the United States noted that:

Diagnosis:

Sites excated at Mesa Verde National Park, such as mesa top and talus slope ruins, or sites cleared of debris, as most cliff dwellings, have been stabilized and undergo periodic maintenance. Stabilization practices are designed to retain as much of the original fabric as is consistent with sound preservation practices. Ruins are not reconstructed, but measures are taken to maintain them as found or as revealed through excavation.

As new methods and materials for preservation are developed, they are incorporated into the preservation program (if found superior to current practices).

In addition to the condition of the ruins themselves, steps have been taken to protect and preserve the immediate environs to guard them from natural and human destructive forces. Runoff drainage about sites has been altered so that water neither stands, nor flows, over open sites. Waterflow over the cliffs after heavy rains has been diverted so that water will not enter the caves. An elaborate drainage system was cut onto the cliff behind Cliff Palace to drain away water that was seeping over the cave floor and weakening foundations of the cliff dwellings. Visitors are not allowed to visit ruins unless they are accompanied by Park Service personnel, and the number of visitors allowed in fragile sties is limited. Unobtrusive roofs have been placed over some smaller open-village sites to protect them from rain and snow.

Many unexcavated sites at Mesa Verde–not accessible to the public–are routinely patrolled to guard against vandalism.

The site was considered to be in excellent condition at the time of inscription.

3b) Have there been significant changes in the authenticity or integrity of the property since inscription?

3b1) If YES, please describe the changes to the authenticity or integrity and name the main causes.

II.4 Management

(See Section 4 of the current Nomination Form and Section 2 and 4 of the original Form)

Management	Regime
4a) How can all that apply	the ownership/management of the property best be described? (Select .)
\boxtimes	management under protective legislation
	management under contractual agreement(s) between State Party and a third party
	management under traditional protective measures
	other
Please	e describe.
Servic Syster	Mesa Verde National Park is owned by the United States Government half of the American people. It is managed by the National Park e, a federal agency. As a National Park (or unit of the National Park m), it receives the highest level of conservation protection afforded by all law in the United States.
1906.	Mesa Verde Natioal Park was established by the United States nment through legislation (Public Law 34, Stat. 616) signed on June 29, The park was established specifically to protect cliff dwellings built by neestral Puebloan peoples between 1100-1300 AD.
4b) Please in	dicate under which level of authority the property is managed
Nation	al
Please	e describe
Depar	Mesa Verde is a National Park within the National Park Service of the tment of the Interior of the United States federal government.

4c) Please describe the legal status of the property. For example, is it a national, provincial or territorial park? A national or provincial historic site?

As stated above, Mesa Verde is a National Park within the National Park Service of the Department of the Interior of the United States federal government.

4d) Please provide the full name, address and phone/fax/e-mail of the agency(ies) directly responsible for the management of the property.

Contact #1

Agency Name: National Park Service

First Name: Fran
Last Name: Mainella
Address: 1849 C St.
City: Washington

State/Prov: D. C. Postal Code: 20013

Telephone: 202-208-4621

Fax:

Email: fran_mainella@nps.gov

Contact #2

Agency Name: Mesa Verde National Park

First Name: Larry T.
Last Name: Wiese
Address: P. O. Box 8
City: Mesa Verde

State/Prov: Colorado Postal Code: 81330

Telephone: 970-529-4465 Fax: 970-529-4637

Email: larry_wiese@nps.gov

- 4e) Please provide a list of key laws and regulations, which govern the protection and management of the cultural and natural resources of the property.
 - PL 34-616 Enabling Legislation for Mesa Verde National Park (June 29, 1906)
- PL 36-796 Legislation to grant leases & permits, exclude public from access to ruins (June 25, 1910)
 - PL 38-82 Boundary Amendment (June 30, 1913)
 - PL 64-235 National Park Service Organic Act (1916)
 - PL 40-152 Legislation to accept donation of lands to the park (June 12, 1917)
 - PL 45-458 Further definition of Exclusive Federal Jurisdiction (April 25, 1928)
- PL 46-315 Authorization of Operation & Rates at Aileen Nusbaum Hospital in Mesa Verde (May 14, 1930)
- PL 46-1043 Prohibition of Leasing or Permitting of Mineral Resources in Park (January 26, 1931)
- PL 46-1422 Authorized Executive Proclamation to add land to park for access to Cortez-Mancos road (February 26, 1931)
- PL 47-2511 Presidential Proclamation No. 1998 enacting PL 46-1422 (May 27, 1932)
 - PL 77-473 Boundary Revision (December 23, 1963)
- PL 90-2692 Designated 8,100 acres of Wilderness in Mesa Verde (October 20, 1976)
 - PL 59-209 Antiquities Act of 1906
 - PL 89-665 National Historic Preservation Act of 1966, as amended
 - PL 91-190 National Environmental Policy Act, 1969

PL 96-95 Archeological Resources Protection Act, 1979
PL 101-601 Native American Graves Protection and Repatriation Act, 1990
National Park Service Management Policies, 2001
National Park Service Director's Order #28, Cultural Resource Management

36 CFR 68 Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation

4f) Please describe the administrative and management arrangements that are in place for the property concerned, making special mention of the institutions and organizations that have management authority over the property and the arrangements that are in place for any necessary coordination of their actions. Make special reference, if appropriate, to the role of First Nations in managing the property.

Day-to-day operations of Mesa Verde National Park are overseen by the Superintendent of the park. The Superintendent reports to the Intermountain Regional Director; the Regional Director reports to the Director of the National Park Service.

The park consults regularly with representatives from 24 culturally-affiliated Native American tribes who are descendents of the Ancestral Puebloan peoples. These consultants work with park staff to revise information booklets and films, review the content of museum exhibits, advise on the content of public interpretive programs, and review proposed construction/development plans.

4g) Please also note whether there have been any significant changes in the ownership, legal status, contractual or traditional protective measures, or management regime for the World Heritage Site since the time of inscription.

There have been no changes in the ownership or management of Mesa Verde National Park since the time of incription.

4h) Is there a management plan for the property?

YES

4h1) If YES, please summarize the plan, indicating if the plan is being implemented and since when, and the URL where the plan can be located, if available. (A copy of the plan should be submitted in December 2004. See Section 8)

Mesa Verde National Park's General Management Plan was completed in 1979. All parks are required to have a General Management Plan by law. The park would like to initiate the process of preparing a new General Management Plan, but there is no schedule for accomplishing this.

The current plan focuses on existing conditions and discusses alternatives for visitor use and interpretation, access and circulation, concessioner operations, administration, housing and maintenance. Most of the proposed alternatives have not been implemented. Some projects are in the planning stages, including a new curatorial facility and a Cultural/Visitor Center at the park entrance, and development of a transportation system for visitors.

The current plan is not available on the Internet.

4h2) If NO, is a management plan under preparation or is preparation of such a plan foreseen for the future?

Financial Resources

4i) What is the annual operating budget for the property in the current fiscal year? (For sites consisting of more than one property provide the budgets of constituent parts.)

In FY03 (October 1, 2002-September 30, 2003), the park's federal operating budget was \$4,858,000 USD. This was supplemented by \$3,118,288 USD of funds from the National Park Service, park entrance fees, and grants from public and private institutions. This totals to \$7,976,288 USD to operate Mesa Verde National Park for FY2003.

Sources of Expertise and Training in Conservation and Management Techniques

4k) Please describe any sources of specialized expertise, training, and services that come from sources off-site (e.g., training centers, museum conservation facilities).

In 1994, Mesa Verde National Park developed a cooperative agreement with the Historic Preservation Department at University of Pennsylvania. Since then, Director Frank Matero and his graduate students have established a long-term program to document, treat, and monitor surface finishes in alcove sites. This has resulted in the development of a new, simple technique for re-adhering painted and plastered surfaces that are exfoliating from the structures. Matero works all over the world at World Heritage sites, and his connections have resulted in staff from Getty Conservation Institute and British Heritage working with him at Mesa Verde.

The park has benefited from archivists, from other centers within the National Park Service, working to organize and catalog Mesa Verde's large archival collection.

Many of Mesa Verde's staff have advanced degrees. These include:
Linda A. Towle, Chief of Research & Resource Management, MA Anthropology
Larry V. Nordby, Research Archeologist, MA Anthropology
Donald Corbeil, Historical Architect, MA Architecture
Julie A. Bell, Archeologist, MA Anthropology
Rebecca Carr, Conservator, MA Historic Preservation
Patricia Flint-Lacey, Editor, PhD Anthroplogy

The National Park Service has several national training centers (Mather Training Center in Harper's Ferry, West Virginia, and Albright Training Center at Grand Canyon National Park in Arizona) which offer curatorial, conservation and management courses. However, Mesa Verde staff have not attended many of these courses recently due to budget cuts.

4j) Please provide information about the number of staff working at the World Heritage Site (enter figures).

Full Time: 75 (Value must be a number)
Part Time: 0 (Value must be a number)
Seasonal: 145 (Value must be a number)
Other: 316 (Value must be a number)

Please list the job categories of these staff (e.g., Park Superintendent, Historian, Ecologist, Interpreter, General Works/Maintenance Manager) and describe the specialized skills and expertise of the World Heritage Site's staff members.

Mesa Verde park management is organized into five divisions: Administration & Planning (15 staff), Interpretation and Visitor Services (50 staff), Law Enforcement and Fire Management (50 staff), Maintenance (49 staff), and Research & Resource Management (56 staff). The latter division is responsible for the management of the archeological sites, the museum collection, and natural resource issues.

The "Other" staff listed above include 200 employees of the park's concessionaire, 20 employees of the park's co-operating association, and 96 volunteers. All numbers are based on staff in FY2003.

Staff who work directly on the preservation of World Heritage site resources are archeologists, a conservator, an Historic Architect, and a structural engineer. These people have college or graduate level education in their areas of expertise. The masonry workers who stabilize these sites have several decades of experience working on Ancestral Puebloan architecture.

Visitation

41) Are there any visitor statistics for the site?

YES

411) If YES, please provide the annual visitation for the most recent year it is available, indicating what year that is, a brief summary of the methodology for counting visitors, and briefly describe the trends in visitation. (In describing these trends, please use the year of inscription as a baseline.)

Annual visitation at Mesa Verde National Park for calendar year 2003 was 460,066. The visitor count is determined by an electronic "counter" at the park entrance. Service vehicles are subtracted from the count when noted by the Ranger at the entrance station. A multiplier of the number of people per vehicle, which varies by time of year, is used to determine the actual count of visitors.

Mesa Verde National Park Visitation Trends Years 1978 to 2002:

- -According to National Park Service (NPS) Records, Mesa Verde National Park attracted approximately 650,000 recreation visitors in 1978. From 1978 to 2002, year-to-year visitation at Mesa Verde fluctuated; significant increases and decreases have occurred.
- -Annual visitation peaked in 1988 at 772,183. The most dramatic sustained growth over the past 25 years occurred between 1984 and 1988, with an average annual increase of over 10 percent per year.
- -The largest declines in visitation occurred in 1979, 1984, 1989, 1993, 2000 and 2002. Annual visitation of 406,385 in year 2002 represented the lowest total since 1965.
- -No specific study of the causes of visitation increases and decreases has been conducted for Mesa Verde or other attractions in the region. Both natural and social events have likely contributed to the changes. The most recent declines are largely attributable to the Bircher and Pony Mesa Fires in year 2000, and the Long Mesa Fire in year 2002. The state of the national economy, combined with declines in Colorado and international tourism activity, were also likely factors over the past three years.
- -Over the last two decades Mesa Verde visitation has followed similar trends as other National Parks throughout neighboring states (Utah, Arizona) and region. The 1980s generally exhibited consistent growth trends, with a more level pattern and minimal growth throughout the 1990s.
- -From 1989 through 1999 (prior to the recent wildfires) Mesa Verde exhibited an overall average annual growth rate of just over one-half percent per year. This represents an average increase of approximately 3,500 visitors each year. However, during that same ten-year period, year-to-year visitation also decreased to some extent on four separate occasions.
- -Peak season visitation at Mesa Verde occurs during the months of June through August; approximately 60 percent of annual visitation occurs during these three months. Over 80 percent of annual visitation typically occurs from May through September.

4m) Please briefly describe the visitor facilities at the property.

- 1) The main park road runs from the park entrance (Colorado Route 160) to Headquarters, a distance of 20 miles. Additional roads in the park include Mesa Top and Cliff Palace loop roads (7 miles each), and Wetherill Mesa road (12 miles).
- 2) There are numerous scenic overlooks along these roads. Overlooks on the main park road include Mancos Valley Overlook, Montezuma Valley Overlook, and Geologic Overlook. The Mesa Top loop includes overlooks at Navajo Canyon, Square Tower House, Sun Point, and Fewkes Canyon. The Cliff Palace loop includes overlooks at House of Many Windows and Hemmenway House.
- 3) The Far View Lodge (and dining room) is open for overnight accommodations from April to October.
 - 4) Morefield campground is open for camping from April to October.
- 5) The park has two cafeterias, Spruce Tree Terrace which is open year round and Far View Terrace which is open from April to October.
 - 6) A snack bar and bookstore are located at the Wetherill Mesa kiosk.
- 7) Several restrooms are located in the Headquarters' area: Cliff Palace, Balcony House, Mesa Top loop, Wetherill Mesa, and Badger House trail.
- 4n) Is there tourism/visitor management plan for the property?

NO

4n1) If YES, please briefly summarize the plan, and provide a URL where the plan can be located.

Scientific Studies

4o) Please list key scientific studies and research programs that have been conducted concerning the site. (Please use the year of inscription as a baseline.)

A great deal of research has been conducted at Mesa Verde National Park since 1978. It is not possible to summarize all of this, but most recent research has been conducted through the park's Archeological Site Conservation Program (ASCP). In 1994, Mesa Verde National Park staff developed a long-term plan for the proper preservation of the 600 alcove sites; estimated cost for implementing this plan was \$10 million USD. The Archeological Site Conservation Program was created to accomplish this plan.

Since that time, the park has received approximately \$4 million USD to undertake this work. Most of this funding came from Save America's Treasures grant program. This federally supported program provided funding for preservation of United States' national treasures such as the Star Spangled Banner, Liberty Bell and cliff dwellings at Mesa Verde. Half of this funding came from the federal government, and the remainder came from private donations.

An additional \$3 million USD of funding, spread over 3 years, allowed park staff to complete development of procedures and techniques to be used, and hire and train more than 50 professional staff. ASCP has conducted condition assessments of 150 cliff dwellings, undertaken detailed, stone-by-stone, documentation of the architecture and plastered surfaces in Cliff Palace, Spruce Tree House, Oak Tree House and Spring House, and has undertaken preservation treatment at many of these sites. Treatments include installation of drip lines on the face of the alcoves to divert water away from the alcove interior, documentation of petroglyphs and painted surface finishes, re-adhering fragile plaster, and stabilizing standing walls by repointing the stones and replacing deteriorating sandstone building blocks. Inventories of petroglyphs and historic inscriptions have been completed, and prehistoric wood has been tree-ring dated. The work accomplished under this grant is summarized in a final report (Nordby 2003).

The park now has a well-trained staff ready to continue with assessment of the remaining 450 alcove sites, a plan to document the architecture in several more of the large alcove sites, and a backlog of treatments needed at the sites already assessed; this year we are beginning a monitoring program to re-visit these sites periodically to insure that past treatments have been effective and to determine if future work is warranted.

Our experience with the Save America's Treasures grant demonstrates that park staff can successfully manage a million dollar/year program. At the rate of 50 sites assessed per year, it will take approximately 9 years to assess all 600 alcove sites. Documentation and treatment resulting from this assessment will take several more years; monitoring must be an on-going program.

Our revised estimate for the cost of the Archeological Site Conservation Program is \$12 to \$15 million USD over the next 10 years. The park is receiving \$200,000 USD federal and non-federal grant money for this work in 2004. Without significant increases in this funding, the park will never be able to achieve proper preservation of the 600 alcove sites under its care.

A bibliography of many of the cultural resource studies is attached to this report.

401) Please describe how the results of these studies and research programs have been used in managing the World Heritage Site.

Computerized documentation from the Archeological Site Conservation Program allows the park to track impact on the sites from visitors and natural processes over time. This data allows park management to make informed decisions about carrying capacity at various sites which are open to the public, request funding for specific problem areas, and determine appropriate and effective levels of long-term preservation treatment.

New interpretations from this research are incorporated into the park's interpretive programs so the public is better informed about the prehistory of the park and the region. For example, the architectural documention of Cliff Palace lead to a new interpretation of how the site may have been used by ancestral Puebloan peoples. Previously, the site had been described as a habitation site with 150 rooms which was occupied by many families. However, the unusually large number of kivas (underground ceremonial areas) for this smaller number of "habitation" rooms has lead to the hypothesis that this was a regional center for semi-annual/annual/biannual ceremonies, and that the site was occupied by a small group of families who served as "care takers."

4o2) What role, if any, has the property's designation as a World Heritage Site played in the design of these scientific studies and research programs? For example, has there been a specific effort in these programs to focus on the recognized World Heritage values of the property?

The World Heritage designation, in and of itself, has not been a factor in the design of studies and research programs.

However, Mesa Verde National Park was included on the World Monument Fund's "10 Most Endangered Sites" list in 1998-99. This listing, which focused on the park's World Heritage values, resulted in funding through the World Monuments Watch grant program. The park received grants totaling \$72,000 USD from America Express and The Baye Foundation to undertake further research in the Archeological Site Conservation Program described above. This Endangered Sites listing contributed to Mesa Verde being awarded the \$3 million Save America's Treasures grant in 1999.

Education, Information and Awareness Building

4p) Is there a plaque at the property indicating that it is a designated World Heritage Site?

YFS

4q) Is the World Heritage Convention logo used on all of the publications for the property?

NO

4r) Are there educational programs concerning the property's World Heritage values aimed at schools?

YES

4r1) If YES, please briefly describe these programs.

Prior to and since designation as a World Heritage Site, Mesa Verde National Park has offered educational materials and programs to schools in the local area and all over the United States. All park educational efforts focus ultimately on stewardship of these resources for present and future generations. The World Heritage designation is used to show these students they are helping preserve these resources not just for the people of the United States, but for people all over the world. This designation has enabled us to show students that Mesa Verde, the site "in their backyard," is as important as the Pyramids in Egypt and the Great Wall of China.

In the last few years, park staff have included a part-time Education Specialist position to formalize the park's school group visit program. In FY2003, 2,280 students visited Mesa Verde as part of a school group visits. This program includes an activity guide for teachers to use in preparing the students for their visit to the park. These visits include some "class room" time with the park's Education Specialist, hands on experiences with artifacts, a discussion of site etiquette, and a tour of Balcony House. In FY03, 83 school groups visited Balcony House on special education tours. These tours are provided in the spring and the fall, when the site is not open to the public. In addition, the Education Specialist did 3 outreach programs at local schools and the county fair.

More information about the park's educational program can be found on the web site at http://www.nps.gov/meve/edu_resources.

4s) Are there special events and exhibitions concerning the property's World Heritage values?

YES

4s1) If YES, please briefly describe them.

In 1984, Mesa Verde National Park hosted the First World Conference on Cultural Parks. This conference was attended by preservationists from around the world, and 71 papers were presented. The Proceedings were published in "International Perspectives on Cultural Parks" (1989).

4t) Please briefly describe the facilities, visitor center, site museum, trails, guides and information material that are available to visitors to the World Heritage Site.

In addition to visitor facilities listed in 4m above, there are:

- 1) An Entrance Station where the visitors receive park information and pay a \$10 USD per car entrance fee (valid for 7 days).
- 2) The Far View Visitor's Center (open April to October) where visitors buy tickets for guided tours to cliff dwellings, view exhibits, and purchase books.
- 3) The Chapin Mesa Archeological Museum where visitors can purchase tour tickets (the rest of the year), view exhibits, view an orientation film, and purchase books.

There are ranger-guided tours to:

- 1) Cliff Palace (April to November)
- 2) Balcony House (May to October)
- 3) Long House (June to August).

There are self-guiding tours (with a Ranger stationed at the site) to:

- 1) Spruce Tree House (year-round)
- 2) Step House (June to August).

Several subsurface archeological sites (dated 450-900 AD) are open to the public under large shelters along the Mesa Top Loop Road and at Badger House Community.

In addition to a free park guide given to every car at the Entrance Station, the following printed guides are available for purchase:

- 1) Cliff Palace
- 2) Balcony House
- 3) Spruce Tree House
- 4) Long House
- 5) Step House
- 6) Mesa Top Loop
- 7) Badger House Community
- 8) Geologic Overlook
- 9) Knife Edge Trail

There are also several hiking trails in the park:

- 1) Petroglyph Point
- 2) Spruce Canyon
- 3) Soda Canyon Overlook
- 4) Nordenskold 16 Overlook
- 5) Badger House Community
- 6) Prater Ridge
- 7) Point Lookout.

Point Lookout Fire Tower is open for visitor information during the summer.

The Mesa Verde Museum Association sells many books about Mesa Verde at their bookstore in the Museum.

Park information is available on the park's website: http://www.nps.gov/meve

Mesa Verde National Park staff are preparing a new Comprehensive Interpretive Plan to more clearly define the message that we convey to our visitors. This plan will also look at new ways to educate the public about these World Heritage values during their visit to the park.

4u) What role, if any, has the property's designation as a World Heritage Site played with respect to the education, information and awareness building activities described above? For example, has the World Heritage designation been used as a marketing, promotional, or educational tool?

The park's designation as a World (Cultural) Heritage Site is noted in interpretive materials given to visitors, and is mentioned in all fund-raising efforts.

As noted in the periodic report from Chaco Culture National Historical Park, there is some mistrust and misunderstanding in this region concerning the UNESCO World Heritage designation and the park has to educate a skeptical minority that the United Nations does not run Mesa Verde National Park.

II.5 Factors Affecting the Property(See Section 5 of the current Nomination Form)

5) Please briefly identify factors affecting the property under the following headings: Development Pressures, Environmental Pressures, Natural Disasters and Preparedness, Visitor and Tourism Pressures, Number of Inhabitants Within Property and Buffer Zone and Other - major factors likely to affect the World Heritage values of the property. First discuss those that were identified in the original nomination, in the same order in which they were presented there, then those that have been discussed in reports to the World Heritage Committee since inscription, and then other identified factors.

This section should provide information on all the factors which are likely to affect a property. It should also relate those threats to measures taken to deal with them, whether by application of the protection described in Section 4e or otherwise.

Not all of the factors suggested in this section are appropriate for all properties. The list provided is indicative and is intended to assist the State Party in identifying the factors that are relevant to each specific property.

(In describing these trends, please use the year of inscription as a baseline.)

For EACH Factor, please specify the following: key actions taken to address factor any plans that have been prepared to deal with factor in the future whether the impacts of factor appears to be increasing or decreasing, and the timeframe for which the comparison is being made.

Development Pressures

5a) Provide information about Development Pressures on the following: demolitions or rebuilding; the adaptation of existing buildings for new uses which would harm their authenticity or integrity; habitat modification or destruction following encroaching agriculture, forestry or grazing, or through poorly managed tourism or other uses; inappropriate or unsustainable natural resource exploitation; damage caused by mining; and the introduction of invasive nonnative species likely to disrupt natural ecological processes, creating new centers of population on or near properties so as to harm them or their settings.

Development within boundaries of Mesa Verde National Park focuses on infrastructure such as replacing water and electric lines, water tanks and other utilities destroyed by wildfire, repairing the park entrance road, and construction of new employee housing. All projects are carefully scrutinized for their potential impact on World Heritage values of the site through the National Environmental Policy Act process. If warranted, an Environmental Assessment or Environmental Impact Statement is prepared for public review and comment.

Grazing, agriculture and forestry are not allowed within the boundaries of the park, nor is mining or mineral extraction.

The park is bounded on the south and west by the Ute Mountain Ute Reservation and little development is occuring near the park boundaries because this area is inaccessible. Development is occuring along Highway 160, which runs along the northern boundary of the park. This currently entails a housing development on private land, which is across from the entrance to the park. This does not encroach upon park land but the houses are visible from the park entrance road. A small public attraction, the Reptile Reserve, was built on Highway 160 between the park and the town of Mancos in the last few years. Most of the land along 160 from Cortez to Mancos is privately held and is not regulated by the County. Therefore, the potential exists for further development in this corridor in the next few years. The Mesa Verde Foundation, a non-profit friends group, has purchased some land adjacent to park boundaries to create a buffer zone from future development.

Future development along Highway 160 would impact the vistas from the park entrance road, and possibly create more unauthorized entry into backcountry areas of the park.

The introduction of non-native invasive plant species has become a major problem in the last decade. Musk thistle, houndstongue, spreading pepperweed, diffuse knapweed, and leafy spurge are the most noxious and prolific of these non-native species. These are visible on the landscape in the public areas of the park so they are obvious to many summer visitors.

The park has taken several approaches to reducing populations of these species. The Exotic Plant Management Team, part of the NPS Northern Colorado Plateau Network, has worked in the park to treat about 50 acres. A local contractor has been hired to mechanically spray areas with NPS-approved herbicides, and several groups of volunteers have mechanically removed thistle heads and dug up plants by the roots. From 1999-2002, the park employed a seasonal weed control crew, and some progress towards eradicating these species was made. However, funding has not allowed the hiring of a crew in 2003 or 2004, so the park is seeing setbacks in our weed control efforts.

During the last decade, we have achieved good results in reducing musk thistle by releasing crown weevils into thistle stands. It takes 4-8 years for the weevil population to effectively reduce thistle, but we have seen good results in Morefield Canyon.

Environmental Pressures

5b) Environmental pressures can affect all types of property. Air pollution can have a serious effect on stone buildings and monuments as well as on fauna and flora. Desertification can lead to erosion by sand and wind. What is needed in this section is an indication of those pressures which are presenting a current threat to the property, or may do so in the future, rather than a historical account of such pressures in the past.

Mesa Verde National Park is a Class I Air Quality park so the effects of air pollution on the World Heritage values are not as serious as for sites in or near major cities. The park's air quality monitoring program includes National Atmospheric Deposition Program (NADP) equipment, an IMPROVE site for dry deposition, a CastNet site for ozone, a MDN site for mercury, and wet deposition equipment.

Air quality monitoring in the park and throughout the Southwestern United States has shown a slow, steady increase in the acidity of acid rain. Part of this may be due to coal burning power plants in the region so increased threats from air quality can be expected in the future. There has also been a slow decline in visibility and increases in ozone and mercury levels. Park staff actively participate in meetings and environmental review of proposed coal-burning plants and gas and oil extraction sites in northern New Mexico which directly effect the park's air quality.

Major threats to the archeological sites are from increased erosion following the wildfires in the park (see below). Removal of vegetation cover, which provides shade to many sites, could result in increased rates of deterioration of the sandstone due to increased solar radiation on the sites.

Since the 1996 fire, the park has developed effective post-fire treatments to help reduce impact of runoff on alcove and buried surface sites. These treatments include controlling erosion higher up in a drainage with wattles made of aspen matting placed perpindicular to the slope to reduce runoff entering the sites downslope. Re-seeding with native vegetation is accomplished to help promote growth to naturally hold the exposed soil in place. These treatments have been successful for small amounts of rainfall immediately after a fire but are not totally effective in large rain events. Regretably, funding was not been available after the 2003 and 2003 wildfires to undertake these treatments, and a 100-year rain event in September 2003 produced major amounts of runoff into alcove sites within those burned areas.

Natural revegetation of the burned area is the best solution to reduce erosion and solar radiation but it will take decades before natural vegetation will return. These issues will continue to be a threat to preservation of many archeological sites.

Natural Disasters and Preparedness

5c) This section should indicate those disasters which present a foreseeable threat to the property and what steps have been taken to draw up contingency plans for dealing with them, whether by physical protection measures or staff training. (In considering physical measures for the protection of monuments and buildings it is important to respect the integrity of the construction.)

The major natural threat to Mesa Verde's cultural heritage values comes from wildland fire. Since 1989, 6 major wildfires have burned more than two-thirds of the park's 52,000 acres. These fires pose threats to visitors, staff, infrastructure, natural resources, archeological sites, and the museum's collections.

The park has an evacuation plan to remove visitors and staff as soon as a wildfire poses any threat. During the summer fire season, 2-3,000 visitors may be in the Headquarter's area of the park and on tours in cliff dwellings, and they must all get in their personal vehicles and drive out using the 20-mile park entrance road, the only road in and out of the park. Park staff has successfully accomplished evacuations of large number of visitors on 4 occassions in the last 8 years. Each division also has an evacuation plan for their staff and equipment, including people who may be working in the park's backcountry and, as such, are required to hike for an hour or more to reach a vehicle in order to evacuate. Evacuation plans are reviewed regularly in staff meetings during fire season. After each evacuation, the park staff reviews the plans and updates them with "lessons learned."

The park's Fire Management Plan addresses wildland fire threat to the historic buildings in the park's National Historic Landmark district and National Register districts. In 1993, the park began hazard fuel reduction in the park's developed areas to reduce thickness of pinon-juniper vegetation around houses and offices (to improve their defensability). Reduced fuel loads successfully saved many historic structures during the Long Mesa fire in 2002.

Although a few archeological sites have been damaged directly by fire entering the site (heating the sandstone, and causing petroglyphs to exfoliate) most of the potential damage comes from post-fire erosion. Increased runoff from the burned and denuded mesa tops dumps quantities of ash, mud, and larger debris directly into alcove sites at accelerated velocities. Water and other material can damage mud mortar, saturate basal stones, and cause wall failure. It can also damage or remove fragile painted surfaces from walls.

To reduce the threat of fires, dense pinyon-juniper forest on the mesa tops and in front of alcove sites has been mechanically thinned at several sites. This has proved effective in the more recent fires which have burned over these sites. The park has a plan to undertake more fuel reduction around sheltered sites, and is developing a new Fire Management Plan to undertake future thinning projects. Only about 16,000 acres of the park have not burned in the last 100 years, and a severe drought in the American Southwest for the last several years makes it likely that future fires will occur in the park.

Since the 1996 fire, the park has developed effective post-fire treatments to help reduce impact of runoff on alcove and buried surface sites. These treatments include controlling erosion higher up in a drainage with wattles made of aspen matting placed perpindicular to the slope to reduce the runoff entering the sites downslope. Re-seeding with native vegetation is conducted to help promote growth to naturally hold exposed soil in place. These treatments have been successful for small amounts of rainfall immediately after a fire, but are not totally effective in large rain events. Natural revegetation of the burned area is the best solution but this will require 20-60 years in certain plant communities. The Burned Area Emergency Response (BAER) program of the federal government funded these projects following the fires of 1996 and 2000. However, this funding has not been available after the last two park fires.

One benefit of resultant lack of vegetation following a wildfire is that it is possible to detect many archeological sites that were obscured by vegetation during earlier archeological surveys of the park. Six hundred (600) new sites have been recorded in the years following these fires. These sites, plus those discovered during construction projects, has increased the number of archeological sites in the park by 800 since the park's inscription in 1978.

Fuel reduction also occurred around the Research Center where Mesa Verde's priceless 3-million object collection is stored. In the summer of 2002, the park decided to move the collection out of the park in order to remove it from the direct threat of wildfire. Since the collection was already packed for the renovation of the Center, it was possible (although challenging) to move it over a 2-week period. It was safely installed off-site only 36 hours before the Long Mesa fire burned around the Research Center. The collection has since been returned to the renovated Research Center. Thanks go to Wal-Mart, who loaned us the use of their emply store in Cortez, Colorado, to store the collection for 6 months at no cost.

Visitor and Tourism Pressures

5d) In completing this section what is required is an indication of whether the property can absorb the current or likely number of visitors without adverse effects (i.e., its carrying capacity). An indication should also be given of the steps taken to manage visitors and tourists. Possible impacts from visitation that could be considered include the following:

- i. damage by wear on stone, timber, grass or other ground surfaces;
- ii. damage by increases in heat or humidity levels;
- iii. damage by disturbance to the habitat of living or growing things; and
- iv. damage by the disruption of traditional cultures or ways of life.

Visitor carrying capacity was the only factor identified in the original nomination. Mesa Verde National Park recently evaluated the carrying capacity of archeological sites that are open to the public. The enabling legislation for the park requires that a uniformed Park Ranger be present in any cliff dwelling visited by the public. Therefore, cliff dwellings that are open to the public are either entered in a Ranger-guided tour or are self-guiding, with a Ranger stationed in the site.

Several cliff dwellings have limits for the number of people who can purchase a ticket for a Ranger-quided tour. These limits were established based on the number of people that one Ranger could effectively quide, and a desire to improve the visitor's experience by not having to wait in line for a tour and having fewer people on the tour with them. A recent carrying capacity study of these sites confirmed that the current number of people per tour is not adversely affecting integrity of these sites.

Sites with limits on the size of the tour are:

1) Cliff Palace: Ranger Guided, April-November

60 people/tour; tickets required

2) Balcony House Ranger Guided, May-October

50 people/tour; tickets required

3) Long House Ranger Guided, May-September 60 people/tour; tickets required

One concern raised by the carrying capacity study was the large number of visitors who may be in Spruce Tree House (a self-guided site) during the summer months. The park is reluctant to place a limit on number of visitors because we want to have one alcove site where the public can go without a ticket.

Park staff have identified a number of visitor impacts which, although individually small, have a cumulative negative effect on sites over time. These include "worry holes" in sandstone; stains, oils, polishing, abrasion from touching/rubbing stone; loosened masonry, loss of mortar from leaning/stepping on walls; sanitation, hardening, stabilization, and other changes to sites in efforts to protect from use; removal of artifacts or other materials; graffiti – especially in kivas; loss of plasters from touching/picking at them; leaving litter or offerings; cracking/weakening of walls/structures from vibration from people walking and from cars; disruption/attraction of wildlife; loss of vegetation, soil compaction, erosion; infrastructure failure and accidents (leaks, flooding, etc.); emergency assistance to visitors (e.g. kiva diving); social trailing leading to unprotected sites; vandalism – pushing stones/walls over, etc.; unauthorized access to sites visible from the road or overlooks, parking on roadside; and paving or re-surfacing of previously unpaved trails, paths, or other areas to improve visitor access or accessibility to sites.

The park has also developed a list of management issues and conditions to help reduce visitor impacts. These include keeping the resources and facilities in good condition/appearance; presence of staff; a "presence" through site amenities; peer pressure (educated visitors); education/interpretation; "look but don't touch" barriers; providing gloves to visitors; distance from sources of litter (e.g. concessions); and visitors in smaller groups. The park's on-going education, interpretation, maintenance, and site-preservation programs address several of these issues.

Number of Inhabitants Within Property and Buffer Zone

5e) Include the best available statistics or estimate of the number of inhabitants, if any, within the property and any buffer zone and describe any activities they undertake which affect the property.

The only inhabitants within Mesa Verde National Park are park employees who rent park-owned housing. There are 48 houses occupied by an average of 80 employees per year. The majority of these employees live in the park only during the high visitation season (April to October). Researchers and volunteers occasionally occupy these houses when space is available.

Development is occuring along Highway 160, which runs along the northern boundary of the park. This currently entails a housing development on private land which is across from the entrance to the park. This does not encroach upon park land, but the houses are visible from the park entrance road. A small public attraction, the Reptile Reserve, was built on Highway 160 between the park and the town of Mancos in the last few years. Most of the land along 160 from Cortez to Mancos is privately held and is not regulated by the County. Therefore, the potential exists for further development in this corridor in the next few years. The Mesa Verde Foundation, a non-profit friends group, has purchased some land adjacent to park boundaries to create a buffer zone from future development.

Future development along Highway 160 would impact the vistas from the park entrance road, and possibly create more unauthorized entry into backcountry areas of the park.

5f) List Other Factors

None

II.6 Monitoring(See Section 6 of the current Nomination Form)

Administrative Arrangements for Monitoring Property

6a) Is there a formal monitoring program established for the site? In this case, "monitoring" means the repeated and systematic observation and collection of data on one or more defined factors or variables over a period of time.

YES

6a1) If YES, please describe the monitoring program, indicating what factors or variables are being monitored and which partners, if any, are or will be involved in the program.

Mesa Verde National Park is a Class I Air Quality park. The park's air quality monitoring program includes National Atmospheric Deposition Program (NADP) equipment, an IMPROVE site for dry deposition, a CastNet site for ozone, a MDN site for mercury, and wet deposition equipment.

We also monitor water levels in springs and the Mancos River, water quality, wildlife movements, and endangered species such as the Mexican Spotted Owl. Monitoring is usually done by park staff. However, the Mexican Spotted Owl survey is being conducted by staff from the Cooperative Educational Study Unit at Northern Arizona University.

During 2004, Mesa Verde staff will be developing a monitoring program to revisit 150 alcove sites that have been assessed, documented and/or treated since 1996. The staff will use photographs, previous site maps, and field notes to determine if there has been any significant change in architectural elements in the site, damage due to post-fire or other causes of erosion, or vandalism. The protocol for this monitoring will be finalized in spring of 2004.

The National Park Service is developing a systematic approach for region-specific integrated natural resource monitoring programs. Regional networks within the park system are charged with defining the purpose and scope of the monitoring program; compiling and summarizing existing data and understanding park ecosystems; developing conceptual models of relevant ecosystem components; selecting indicators and specific monitoring objectives for each; and determining the appropriate sampling design and sampling protocols. Once design phases have been completed (December 2005), the program will be implemented in each park. The Natural Resource Manager at Mesa Verde has been participating in the development of the plan for our Region's network.

Key Indicators for Measuring State of Conservation

6b) At the time of inscription of the property on the World Heritage list, or while in the process of reviewing the status of the property at subsequent meetings, have the World Heritage Committee and the State Party identified and agreed upon key indicators for monitoring the state of conservation of the property's World Heritage values?

NO

6b1) If YES, please list and describe these key indicators, provide up-to-date data with respect to each of them, and also indicate actions taken by the State Party in response to each indicator.

6b2) If NO key indicators were identified by the World Heritage Committee and used so far, please indicate whether the World Heritage Site management authority is developing or plans to develop key indicators for monitoring the state of conservation of the property's World Heritage Values.

During 2004, Mesa Verde staff will be developing a monitoring program to revisit 150 alcove sites that have been assessed, documented and/or treated since 1996. The staff will use photographs, previous site maps, and field notes to determine if there has been any significant change in architectural elements in the site, damage due to post-fire or other causes of erosion, or vandalism. The protocol for this monitoring will be finalized in spring of 2004.

Results of Previous Reporting Exercises

6c) Please describe briefly the current status of actions the State Party has taken in response to recommendations from the World Heritage Committee at the time of inscription or afterwards, through the process known as "reactive reporting." (Note: The answer to this question will be "not applicable" for many sites.)

Not Applicable.

II.7 Conclusions

World Heritage Values

7a) Please summarize the main conclusions regarding the state of the World Heritage values of the property (see items II.2. and II.3. above).

Mesa Verde National Park was established in 1906 to protect and preserve remarkably well-preserved cliff dwellings built by the Ancestral Puebloan peoples ca. 1100-1300 AD. These sites provide a living link to 24 culturally affiliated Native Amreican tribes. The lifeways represented by these sites and their surviving architecture are of exceptional value to the tribes and world community.

Mesa Verde National Park was inscribed on the World Hertiage list in 1978 under cultural criteria iii. There was no significance statement approved when Mesa Verde was inscribed, so a proposed statement is included in this report.

Management and Factors Affecting Site

7b) Please summarize the main conclusions regarding the management of and factors affecting the property (see items II.4. and II.5. above).

Mesa Verde National Park is managed by the National Park Service and is well-protected by the laws and regulations of the United States federal government. There has been no significant loss of integrity in the site since 1978.

The fiscal year 2003 operating budget for Mesa Verde National Park was \$4,858,000 USD. This funding is derived from the United States federal budget. An additional \$3,118,288 USD of funds were generated through National Park Service project money, park entrance fees, and grants from public and private institutions. This totals \$7,976,288 USD to operate Mesa Verde National Park for FY2003.

Park staff in FY2003 consisted of 75 fulltime and 145 seasonal employees. Another 316 people worked for the park's concessionaire, cooperating association, or volunteered for the park.

During calendar year 2003, 460,066 people visited the park. During the same year, 2,280 students participated in the park's school-group visit program.

Research programs have strengthened at Mesa Verde since 1978, in part to funding throught the World Monuments Fund and Save America's Treasures programs. The Archeological Site Conservaton Program has made significant improvements in management of the park's cultural resources.

Although development and environmental pressures are present, the greatest natural threat to preservation of the site comes from wildland fire. The park has an evacuation plan to protect the lives of visitors and employees, and a Fire Management Plan to protect the historic structures and infrastructures. Fuel reduction in developed areas has reduced the threat of catastrophic wildfire in those areas. Although archeological sites have survived major fires with minor damage, post-fire effects of erosion are serious and long-term.

Visitor impacts to sites are cumulative, but presence of a Park Ranger in all alcove sites open to the public, and limitation of the number of visitors that may enter any site, help to mitigate these effects. Less than 1% of recorded sites are open to the public because the park cannot adequately staff them to insure their integrity.

Proposed Future Action(s)

7c) Please describe briefly future actions that the State Party has approved to ensure the conservation of the World Heritage values of the property.

These sample headings can be used as a checklist.

Modification of legal or administrative structure
Changes to financial arrangements
Increases to staffing level
Provision of training
Modification of visitor facilities
Preparation of a visitor management plan
Studies of public knowledge of the World Heritage Site
Emergency preparedness
Establishment or improvement of a monitoring program.

Each year, park staff supplement funding from the federal government with funding requests to non-federal institutions to hire more staff to better protect archeological sites. Some years more funding is forthcoming than in others. We expect to have funding for two new positions during 2004. These positions, a Conservator and an Exhibit Specialist, will work directly on preservation of the cliff dwelling and other archeological sites in the park.

In 2004, park staff will establish a monitoring plan to re-visit the cliff dwellings that have been assessed and stabilized since 1996. This is intended to be an on-going plan but funding is needed for future years. In 2004 we will also be assessing the condition of several more alcove sites, but our long-term plan is to revisit and evaluate the 450 remaining cliff dwellings, some of which have not been visited by preservation staff in more than 40 years.

Responsible Implementing Agency(ies)

7d) Please identify the agency(ies) responsible for implementation of these actions described in 7c, if different from those listed in Section II.4.

Timeframe for Implementation

7e) If known, or predictable, please provide a timeline for the implementation of the actions described in 7c.

As mentioned, there is some funding from the federal government to provide two new positions and undertake monitoring and assessment work during 2004. However, funding for the monitoring program is only for one year. Proposals are being developed for future years, but no funding has been secured yet.

Needs for International Assistance

7f) Is it anticipated that International Assistance, through the World Heritage Fund, will be requested for any of the planned actions described above?

NO

7f1) If YES, please state the nature of the request and when it will be requested, if known.

Potential Decisions for the World Heritage Committee

7g) Please indicate if the World Heritage Site management authority has preliminarily identified, as a result of this reporting exercise, an apparent need to seek a World Heritage Committee decision to change any of the following:

(Note: Following completion of the Periodic Report exercise, the State Party, in consultation with appropriate authorities, will determine whether to proceed with seeking a Committee decision on these changes. To request such changes, the State Party will need to follow a separate, formal process, subsequent to submitting the report.)

	change to criteria for inscription
	change to Statement of Significance
\boxtimes	proposed new Statement of Significance, where previously missing
	change boundaries or buffer zone

II.8 Documentation

(See Section 7 of the current Nomination Form and Section 3 of the original Nomination Form)

- 8a) Please review the original nomination for the property to determine whether it is necessary or advisable to supply, update or amend any of the following documentation for the World Heritage Site. Indicate what documentation will be supplied to supplement the information found in this report. (This documentation should be supplied at the time the Periodic Report is submitted to the World Heritage Centre, in December 2004.)
 - a) Photographs, slides and, where available, film. This material should be accompanied by a duly signed authorization granting, free of charge to UNESCO, the non-exclusive right for the legal term of copyright to reproduce and use it in accordance with the terms of the authorization attached.
 - b) Topographic or other map or site plan which locates the WHS and its boundaries, showing scale, orientation, projection, datum, site name, date and graticule.

 - X d) A Bibliography consisting of references to all the main published sources on the World Heritage Site, compiled to international standards.
- 8b) Do you have a digital map of the WHS, showing its location and boundaries?

YES

8bi) If yes, in what format(s) is the map?

The map can be made available in any format.

8bii) Is it published on a publicly-accessible website?

NO

8biii) If yes, please provide the URL of the site where the map can be found. Must be a valid URL.

Bibliography of Professional Reports Mesa Verde National Park 1978 to Present

- Adams, Jenny L.
 - 1994 *Pinto Beans and Prehistoric Pots: The Legacy of Al and Alice Lancsaster.* Arizona State Museum Archaeological Series 183, University of Arizona, Tucson, Arizona.
- Bauer, Liz
 - 1991 *Gustaf Nordenskiold: Pioneer Archeologist of Mesa Verde*. Mesa Verde Museum Association, Mesa Verde National Park, Colorado.
- Bell, Julie A., and Lisa Gabbert
 - Welcome to the Neighborhood: Inter and Intra-site Relationships among Three Ancestral Puebloan Cliff Dwelling Sites in Mesa Verde National Park. Paper presented at the 67th Annual Meeting of the Society for American Archeology, March 20-24, 2002. Denver CO.
- Bell, Julie A., and Larry Nordby (organizers)
 - 2002 Mesa Verde National Park Site Conservation Program:
 Interdisciplinary Research in Twelfth and Thirteenth Century
 Communities of the Colorado Plateau. Symposium Presented at the 67th
 Annual Meeting of the Society for American Archeology, March 20-24,
 2002. Denver CO.

Blackburn, Fred

- 2002 Historical Inscriptions and the Expeditionary History of Balcony House, Cliff Palace, Hemenway House, Little Hemenway House, Honeymoon House, and Spruce Tree House. Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.
- Cattanach, George S., Jr.
 - 1980 *Long House: Mesa Verde National Park, Colorado.* Publications in Archeology No. 7-H. National Park Service, Washington, D.C.
- Cole, Sally J.
 - 2002 *Image and Place: Pueblo Rock art and Architectural Art of the Mesa Verde Region.* Paper presented at the 67th Annual Meeting of the Society for American Archeology, March 20-24, 2002. Denver CO.
- Copeland, J. and G. Ives
 - 1992 A Survey of Cliff Palace Wall Decorations and Kiva Designs. Ms. on file, Mesa Verde Research Center, Mesa Verde National Park.

- Corbeil, Donald W., Preston Fisher, Larry V. Nordby, and Mary O. Griffitts

 2002 Structural Evaluation of Spring House (5MV1406). Mesa Verde

 National Park Division of Research and Resources Management, Mesa

 Verde National Park, CO.
- Corbeil, Donald W, Gregory E. Munson, Leland S. Sieb and Johnny Lenihan
 2002 *Data Capture Guidelines and Instructions: ArcDoc AutoCAD Quick Reference Guide.* Mesa Verde National Park Division of Research and
 Resources Management, Mesa Verde National Park, CO.
- Diederichs, Shanna, Jim Kleidon, Michael Hendrix, Dani Long, Sarah Payne, Ed Rezac, Bryan Shanks, Joseph Tuomey, Jeremy Karchut, Vince MacMillan, and John Beezley 2003 *Bircher New Site Inventory*. Division of Research and Resource Management, Mesa Verde National Park, Colorado.
- Duncan, F. L.
 - 1990 *Fire Effects and Cultural Resources: An Annotated Bibliography.*Long Mesa Fire Series, Division of Research & Cultural Resource
 Management, Mesa Verde National Park.
- Eininger, S.
 - 1990 Long Mesa Fire 1989, Archaeological Survey and Post Fire Assessment. Long Mesa Fire Series, Division of Research & Cultural Resource Management, Mesa Verde National Park.
- Ethridge, Gary W.
 - 2002 The Upper Soda Canyon Community at Mesa Verde Coloraado:
 Ancestral Puebloan Rural Households During the Middle to late Pueblo
 III Period. Paper Presented at the 67th Annual Meeting of the Society for
 American Archeology, March 20-24, 2002. Denver CO.
- Fewkes, Jesse Walther
 - 1999 Mesa Verde Ancient Architecture. Avanyu Publishing, Inc.

Fiero, Kathleen

- 1991 *Post-Fire Archaeological Rehabilition. Report on Stage II: Ruins Stabilization.* Long Mesa Fire Series, Division of Research & Cultural Resource Management, Mesa Verde National Park.
- 1999 *Balcony House: A History of a Cliff Dwelling.* Mesa Verde Museum Association, Mesa Verde National Park.

2000 Preserving Dirt-walled Structures in Mesa Verde National Park. In Conservation and Management of Archaeological Sites, 5:1&2.

Fish, S.

1989 Long Mesa Fire: Fire Effects on Pollen: An Evaluation. Long Mesa Fire Series, Division of Research & Cultural Resource Management, Mesa Verde National Park.

Fisher, Preston

- 2002 Square Tower House (5MV650) Structural Assessment. Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.
- When Will the Walls Come Tumbling Down? An Engineer's Perspective to Evaluating Stability of Ancestral Puebloan Structures at Mesa Verde National Park. Paper presented at the 67th Annual Meeting of the Society for American Archeology, March 20-24, 2002. Denver CO

Flint-Lacey, Patricia R.

2000 Mesa Verde National Park Archeological Site Conservation Program Style Guide for Report Writing. Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.

Flint-Lacey, Patricia and Larry V. Nordby

2002 *Canyonhead Complexes at Hovenweep: AD 1225-1300*. Paper presented at the 67th Annual Meeting of the Society for American Archeology, March 20-24, 2002. Denver CO

Francisco, Liz

- 2001 *Backcountry Condition Assessment Report, 1999.* Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.
- 2001 *Backcountry Condition Assessment Report, 2000.* Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.

Fritz, Noreen R.

2001 Stabilization at 5MV3559, 5MV3543, 5MV3564, and Preservation Maintenance Assessment at 5MV542, 5MV544, 5MV548 (Field Season 2000). Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.

- 2002 Backcountry Stabilization, 2001-2002, Mesa Verde National Park.
 Backcountry Condition Assessment Report, 1999. Mesa Verde National
 Park Division of Research and Resources Management, Mesa Verde
 National Park, CO.
- Horn, J. C.
 - 1989 History of Ruins Stabilization at Cliff Palace and Spruce Tree House, Mesa Verde National Park, Colorado. Alpine Archaeological Consultants, Montrose, Colorado.
- Hutchinson, A. and Jack E. Smith
 - 1993 *Proceedings of the Anasazi Symposium 1991.* Mesa Verde Museum Association, Mesa Verde National Park, Colorado.
- Ives, Gay, Paul Blomgren, Gary Ethridge, Noreen R. Fritz, Laura Martin, Dave Skoglund 2002 Chapin 5 Fire Burned Area Emergency Rehabilitation (BAER) Project, Post-Fire Archeological Assessment. Mesa Verde National Park, Colorado
- Ives, Gay, Joel M. Brisbin, Julie A. Bell, Cynthia L. Williams, Patricia R. Flint-Lacey, Steve Dominguez
 - 1999 *Mesa Verde Waterline Replacement Project, Phase III, Archeological and Historical Studies.* Division of Research and Resource Management, Mesa Verde National Park, Colorado.
- Kleidon, Jim, Michael Hendrix, Dani Long, Sarah Payne, Ed Rezac, Bryan Shanks, Shanna Diederichs, Jeremy Karchut, Vince MacMillan, and John Beezley
 - 2003 *Bircher-Pony Post-Fire Assessment Project.* Division of Research and Resource Management, Mesa Verde National Park, Colorado.
- Matero, Frank, Claudia Cancino, and Rynta Fourie
 - 2002 Conservation of Architectural Surfaces Program for Archaeological Resources: Cliff Palace, Mesa Verde National Park. The Architectural Conservation Laboratory and Research Center Graduate Program in Historic Preservation, Graduate School of Fine Arts. Prepared for Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.

Matero, Frank

2002 *Technical Studies in the Architectural Surface Finishes of Mesa Verde.*Paper presented at the 67th Annual Meeting of the Society for American Archeology, March 20-24, 2002. Denver CO.

- 2002 Conservation of Architectural Surfaces Program for Archeological Resources (C.A.S.P.A.R.) The Architectural Conservation Laboratory and Research Center Graduate Program in Historic Preservation, Graduate School of Fine Arts. Prepared for Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.
- McMillan, Vince, Jeremy Karchut, and Nicholas Parker
 - 2002 *Gully Farmin': the Prehistoric Exploitation of Mesa Verde's Ravines*. Paper presented at the 67th Annual Meeting of the Society for American Archeology, March 20-24, 2002. Denver CO.
- Ninneman, Laura L.D., Gregory E. Munson, and Donald W. Corbeil

 2003 Supplement to Data Capture Guidelines and Instructions. Appendix A in Data Capture Guidelines and Instructions: ArcDoc AutoCAD Quick

Reference Guide. Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.

- Nordby, Larry V., Joel M. Brisbin, and Jim Mayberry
 - 2001 *Tapestries in Stone: Understanding Cliff Palace Architecture.*Archeological Research Series, Architectural Studies Number 4, Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.
- Nordby, Larry V.
 - 1993 Oak Tree House Documentation Form Package and Manual.
 Manuscript on file at Mesa Verde Research Center, Mesa Verde National Park.
 - 2001 Prehistoric Wall Construction Decision-Making at Mesa Verde National Park. Paper presented at the 66th Annual Meeting of the Society for American Archeology, New Orleans, LA.
 - 2002 Preservation and Non-Destructive Research at Spring House (5MV1406). Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.
- Nordby, Larry V., Leland Sieb, Donald Corbeil and Cynthia L. Williams

 2001 Integrative Architectural Documentation at Mesa Verde National Park:

 a Tool for Education, Research and Maintenance. Paper submitted to
 the International Symposium on Virtual and Augmented Architecture
 (VAA01), Dublin, Ireland. On file at the Mesa Verde National Park
 Division of Research and Resources Management, Mesa Verde National
 Park, CO

- Nordby, Larry V. and T. R. Metzger
 - 1991 Architecture as Artifact: This Slice of Orange Ain't Been Squeezed Yet. In Proceedings of the Anasazi Symposium, compiled by A. Hutchinson and J. E. Smith, pp. 135-147. Mesa Verde Museum Association, Mesa Verde National Park.
- Nordby, Larry V., Todd Metzger, Cynthia L. Williams, and James D. Mayberry
 2002 Mesa Verde National Park Archeological Site Conservation Program
 Guidelines. Volume 1: Standards for Field Data Collection and
 Documentation. Mesa Verde National Park Division of Research and
 Resources Management, Mesa Verde National Park, CO.

Nordenskiold, Gustaf

1994 *The Cliff Dwellers of Mesa Verde*. Reprinted 1991. Mesa Verde Museum Association, Mesa Verde National Park, Colorado.

Nusbaum, Jesse L.

1995 The 1926 Re-Excavation of Step House Cave. Reprinted 1991. Mesa Verde Research Series, Paper No. 1. Mesa Verde Museum Association, Mesa Verde National Park, Colorado.

Oliverius, Timothy J., compiler

2003 *Bircher Pony Post-Fire Assessment Project Report*. Mesa Verde National Park, Colorado.

Roberts, David

1999 A Social Divide Written in Stone. Smithsonian 29(11):118-128.

Rogers, Paul

2002 Documenting the Archeologist: An Archivist Attempts to Piece Together 100 Years of Maps and Photos at Mesa Verde National Park, With an Ever Shrinking Institutional Memory. Paper presented at the 67th Annual Meeting of the Society for American Archeology, March 20-24, 2002. Denver, CO.

Silver, C.

1986 Summary of the Results of the 1985 Project Survey of Prehistoric Plaster and Rock Art at Mesa Verde National Park—MV 625, Cliff Palace. Manuscript on file at Mesa Verde Research Center, Mesa Verde National Park.

Smith, Duane A.

1988 *Mesa Verde National Park, Shadows of the Centuries.* Lawrence University Press of Kansas.

- Smith, J. E.
 - 1981 *Pioneering Archaeology in Mesa Verde: The Nusbaum Years.* Mesa Verde Museum Association, Mesa Verde National Park, Colorado.
 - 1985 Mesas, Cliffs, and Canyons: University of Colorado Survey of Mesa Verde National Park 1971-1977. Mesa Verde Museum Association, Mesa Verde National Park, Colorado.

Thiele, Harold E.

2002 Mesa Verde National Park Archeological Site Conservation Program:
Standard Operational Plan for Managing Active, Semi-Active, and
Inactive Archival Records and Their Accession into the Archives. Mesa
Verde National Park Division of Research and Resources Management,
Mesa Verde National Park, CO.

Thompson, Charlotte, and Fred Wong

2000 Biological Assessment, Field Season 2001, at Ancestral Puebloan Cliff Dwellings in Mesa Verde National Park. Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.

U. S. National Park Service

1989 *International Perspectives on Cultural Parks*. Proceedings of the First World Conference, 1984. Mesa Verde National Park, Colorado.

Widdison, Jerold G, Editor.

1991 *The Anasazi: Why Did They Leave? Where Did They Go?* Southwest Natural and Cultural History Association.

Williams, Cynthia L.

2002 Deconstructing Architectural Spaces: A Case Study of Wall and Cultural Space. Paper presented at the 67th Annual Meeting of the Society for American Archeology, March 20-24, 2002. Denver CO.

Wong, Fred, and Cheryl Coon

2002 Biological Assessment, Field Season 2000, at Ancestral Puebloan Cliff Dwellings in Mesa Verde National Park. Mesa Verde National Park Division of Research and Resources Management, Mesa Verde National Park, CO.

Wright, Kenneth R.

2001 Water for the Anasazi—How the Ancients of Mesa Verde Engineered Public Works. Essays in Public Works History, No. 22. Public Works Historical Society, Boulder, Colorado.

Wright Water Engineers, Inc.

2003 Part 3: Summary of Mesa Verde 2000 Bircher Fire Basin Recovery in Morefield Canyon, in Compilation of Technical Research. Wright Water Engineering, Denver, Colorado.